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NOTICE OF ALLOWANCE AND FEE(S) DUE

64280 7590 120022011 MINTZ, LEVIN, COHN, FERRIS, GLOVSKY & POPEO, P.C. ONE FINANCIAL CENTER BOSTON, MA 02111 EXAMINER WANG, JIN CHENG

DADED NUMBER

ART UNIT

2628

DATE MAILED: 12/02/2011

| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|-----------------|-------------|----------------------|---------------------|------------------|
| 09/124,805 | 07/29/1998 | JOHN O. LAMPING | 34874-648F01US | 7115 |

TITLE OF INVENTION: LOCAL RELATIVE LAYOUT OF NODE-LINK STRUCTURES IN SPACE WITH NEGATIVE CURVATURE

| APPLN, TYPE | SMALL ENTITY | ISSUE FEE DUE | PUBLICATION FEE DUE | PREV. PAID ISSUE FEE | TOTAL FEE(S) DUE | DATE DUE |
|----------------|--------------|---------------|---------------------|----------------------|------------------|------------|
| nonprovisional | NO | \$1740 | \$300 | \$0 | \$2040 | 03/02/2012 |

THE APPLICATION IDENTIFIED ABOVE HAS BEEN EXAMINED AND IS ALLOWED FOR ISSUANCE AS A PATENT. PROSECUTION ON THE MERITS IS CLOSED. THIS NOTICE OF ALLOWANCE IS NOT A GRANT OF PATENT RIGHTS. THIS APPLICATION IS SUBJECT TO WITHDRAWAL FROM ISSUE AT THE INITIATIVE OF THE OFFICE OR UPON PETITION BY THE APPLICANT. SEE 37 CFR 1.313 AND MPEP 1308.

THE ISSUE FEE AND PUBLICATION FEE (IF REQUIRED) MUST BE PAID WITHIN THREE MONTHS FROM THE MAILING DATE OF THIS NOTICE OR THIS APPLICATION SHALL BE REGARDED AS ABANDONED. THIS STATUTORY PERIOD CANNOT BE EXTENDED. SEE 35 U.S.C. 151. THE ISSUE FEE DUE INDICATED ABOVE DOES NOT REFLECT A CREDIT FOR ANY PREVIOUSLY PAID ISSUE FEE IN THIS APPLICATION. IF AN ISSUE FEE HAS PREVIOUSLY BEEN PAID IN THIS APPLICATION (AS SHOWN ABOVE), THE RETURN OF PART B OF THIS FORM WILL BE CONSIDERED A REQUEST TO REAPPLY THE PREVIOUSLY PAID ISSUE FEE TOWARD THE ISSUE FEE NOW DUE.

HOW TO REPLY TO THIS NOTICE:

I. Review the SMALL ENTITY status shown above.

If the SMALL ENTITY is shown as YES, verify your current SMALL ENTITY status:

A. If the status is the same, pay the TOTAL FEE(S) DUE shown above.

B. If the status above is to be removed, check box 5b on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and twice the amount of the ISSUE FEE shown above, or

If the SMALL ENTITY is shown as NO:

A. Pay TOTAL FEE(S) DUE shown above, or

B. If applicant claimed SMALL ENTITY status before, or is now claiming SMALL ENTITY status, check box 5a on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and 1/2 the ISSUE FEE shown above.

II. PART B - FEE(S) TRANSMITTAL, or its equivalent, must be completed and returned to the United States Patent and Trademark Office (USPTO) with your ISSUE FEE and PUBLICATION FEE (if required). If you are charging the fee(s) to your deposit account, section "4b" of Part B - Fee(s) Transmittal should be completed and an extra copy of the form should be submitted. If an equivalent of Part B is filed, a request to reapply a previously paid issue fee must be clearly made, and delays in processing may occur due to the difficulty in recognizing the paper as an equivalent of Part B.

III. All communications regarding this application must give the application number. Please direct all communications prior to issuance to Mail Stop ISSUE FEE unless advised to the contrary.

IMPORTANT REMINDER: Utility patents issuing on applications filed on or after Dec. 12, 1980 may require payment of maintenance fees. It is patentee's responsibility to ensure timely payment of maintenance fees when due.

PART B - FEE(S) TRANSMITTAL

Complete and send this form, together with applicable fee(s), to: Mail Mail Stop ISSUE FEE Commissioner for Patents P.O. Box 1450

Alexandria, Virginia 22313-1450 or Fax (571)-273-2885

PREV. PAID ISSUE FEE

□ b. Applicant is no longer claiming SMALL ENTITY status. See 37 CFR 1.27(g)(2).

Date

INSTRUCTIONS: This form should be used for transmitting the ISSUE FEE and PUBLICATION FEE (if required). Blocks 1 through 5 should be completed where appropriate. All further correspondence including the Patent, advance orders and notification of maintenance fees will be mailed to the current correspondence address and indicated unless corrected below or directed otherwise in Block 1, by (a) specifying a new correspondence address; and/or indicated unless corrected below or directed otherwise in Block 1, by (a) specifying a new correspondence address; and/or by indicating a separate "FEE ADDRESS" for maintenance fee notification

JOHN O. LAMPING

PUBLICATION FEE DUE

APPLICATION NO

09/124 805

APPLN, TYPE

Authorized Signature

Note: A certificate of mailing can only be used for domestic mailings of the Fee(s) Transmittal. This certificate cannot be used for any other accompanying papers. Each additional paper, such as an assignment or formal drawing, must have its own certificate of mailing or transmission.

MINTZ, LEVIN, COHN, FERRIS, GLOVSKY & POPEO, P.C. ONE FINANCIAL CENTER BOSTON, MA 02111

FILING DATE

07/29/1998

SMALL ENTITY

Certificate of Mailing or Transmission

I hereby certify that this Fee(s) Transmittal is being deposited with the United States Postal Service with sufficient postage for first class mail in an envelope addressed to the Mail Stop ISSUE FEE address above, or being facsimile transmitted to the USPTO (571) 273-2885, on the date indicated below.

(Depositor's name (Signatur (Date FIRST NAMED INVENTOR ATTORNEY DOCKET NO. CONFIRMATION NO

TOTAL FEE(S) DUE

7115

DATE DUE

34874-648F0111S

TITLE OF INVENTION: LOCAL RELATIVE LAYOUT OF NODE-LINK STRUCTURES IN SPACE WITH NEGATIVE CURVATURE

ISSUE FEE DUE

| nonprovisional | NO | \$1740 | \$300 | 30 | \$2040 | 03/02/2012 |
|--|-----------------------|----------|--|--|--------|------------|
| EXAMINE | R | ART UNIT | CLASS-SUBCLASS | | | |
| WANG, JIN O | HENG | 2628 | 345-441000 | | | |
| I. Change of correspondence address or indication of "Fee Address" (37 CFR 1,533). Change of correspondence address (or Change of Correspondence Address form PTOSB/122) attached. —Tee Address" indication (or "Fee Address" Indication form PTOSB/128 with 23 cm of the Address and Control of the Address of the Address and Control of the Address | | | or agents OR, alternativ (2) the name of a single registered attorney or a | 3 registered patent attorneys ely, firm (having as a member a gent) and the names of up to neys or agents. If no name is | 2 | |
| 3. ASSIGNEE NAME AND RESIDENCE DATA TO BE PRINTED ON THE PATENT (grin or type) PILEASE NOTE: Unless an assigne is identified below, no assigne data will appear on the patent. If an assignee is identified below, the document has been filed for recordation as set forth in 37 CFR 3.11. Completion of this form is NOT a substitute for filing an assignment. (A) NAME OF ASSIGNEE (B) RESIDENCE: (CITY and STATE OR COUNTRY) | | | | | | |
| Please check the appropriate assignee category or categories (will not be printed on the patent): 🔲 Individual 👊 Corporation or other private group entity 👊 Government | | | | | | |
| 4a. The following fee(s) are submitted: Issue Fee Publication Fee (No small entity discount permitted) Achaze Order - # of Copies Achaze Order - # of Copies Chanee in Editiv Status (from status indicated above) 4b. Payment of Fee(s): (Please first reapply any previously paid issue fee shown above) A check is enclosed. Payment by credit card. Form PTO-2038 is attached. Payment by credit card. Form PTO-2038 is attached. The Director is hereby authorized to charge the required fee(s), any deficiency, or credit any overpayment, to Deposit Account Number. | | | | | | |
| Change in Entity Status | tirom stands indicate | u above) | | | | |

Typed or printed name Registration No. This collection of information is required by 37 CFR 1.311. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time your require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer. U.S. Patert and Trademark Officer. U.S. Peterstreat of Commerce, P.O. Box 1450, Alexandria, Virginia 2231-450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, Virginia 2231-450.

NOTE: The Issue Fee and Publication Fee (if required) will not be accepted from anyone other than the applicant; a registered attorney or agent; or the assignee or other party in interest as shown by the records of the United States Patent and Trademark Office.

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

a. Applicant claims SMALL ENTITY status. See 37 CFR 1.27.



UNITED STATES PATENT AND TRADEMARK OFFICE

NITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
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| 64280 75 | 90 12/02/2011 | EXAMINER | | |
| MINTZ, LEVIN, | COHN, FERRIS, G | WANG, JIN CHENG | | |
| ONE FINANCIAL | CENTER | | | |
| | | WANG, JIN CHENG | | |

BOSTON MA 02111

PAPER NUMBER ART UNIT

DATE MAILED: 12/02/2011

Determination of Patent Term Adjustment under 35 U.S.C. 154 (b)

(application filed on or after May 29, 2000)

The Patent Term Adjustment to date is 2043 day(s). If the issue fee is paid on the date that is three months after the mailing date of this notice and the patent issues on the Tuesday before the date that is 28 weeks (six and a half months) after the mailing date of this notice, the Patent Term Adjustment will be 2043 day(s).

If a Continued Prosecution Application (CPA) was filed in the above-identified application, the filing date that determines Patent Term Adjustment is the filing date of the most recent CPA.

Applicant will be able to obtain more detailed information by accessing the Patent Application Information Retrieval (PAIR) WEB site (http://pair.uspto.gov).

Any questions regarding the Patent Term Extension or Adjustment determination should be directed to the Office of Patent Legal Administration at (571)-272-7702. Questions relating to issue and publication fee payments should be directed to the Customer Service Center of the Office of Patent Publication at 1-(888)-786-0101 or (571)-272-4200.

Privacy Act Statement

The Privacy Act of 1974 (P.L. 93-579) requires that you be given certain information in connection with your submission of the attached form related to a patent application or patent. Accordingly, pursuant to the requirements of the Act, please be advised that: (1) the general authority for the collection of this information is 35 U.S.C. 2(b)(2); (2) furnishing of the information solicited is voluntary; and (3) the principal purpose for which the information is used by the U.S. Patent and Trademark Office is to process and/or examine your submission related to a patent application or patent. If you do not furnish the requested information, the U.S. Patent and Trademark Office may not be able to process and/or examine your submission, which may result in termination of proceedings or abandonment of the application or expiration of the patent.

The information provided by you in this form will be subject to the following routine uses:

- The information on this form will be treated confidentially to the extent allowed under the Freedom
 of Information Act (5 U.S.C. 552) and the Privacy Act (5 U.S.C 552a). Records from this system of
 records may be disclosed to the Department of Justice to determine whether disclosure of these
 records is required by the Freedom of Information Act.
- A record from this system of records may be disclosed, as a routine use, in the course of presenting evidence to a court, magistrate, or administrative tribunal, including disclosures to opposing counsel in the course of settlement necotiations.
- 3. A record in this system of records may be disclosed, as a routine use, to a Member of Congress submitting a request involving an individual, to whom the record pertains, when the individual has requested assistance from the Member with respect to the subject matter of the record.
- 4. A record in this system of records may be disclosed, as a routine use, to a contractor of the Agency having need for the information in order to perform a contract. Recipients of information shall be required to comply with the requirements of the Privacy Act of 1974, as amended, pursuant to 5 U.S.C. 552a(m).
- 5. A record related to an International Application filed under the Patent Cooperation Treaty in this system of records may be disclosed, as a routine use, to the International Bureau of the World Intellectual Property Organization, pursuant to the Patent Cooperation Treaty.
- A record in this system of records may be disclosed, as a routine use, to another federal agency for purposes of National Security review (35 U.S.C. 181) and for review pursuant to the Atomic Energy Act (42 U.S.C. 218(c)).
- 7. A record from this system of records may be disclosed, as a routine use, to the Administrator, General Services, or his/her designee, during an inspection of records conducted by GSA as part of that agency's responsibility to recommend improvements in records management practices and programs, under authority of 4 U.S.C. 2904 and 2906. Such disclosure shall be made in accordance with the GSA regulations governing inspection of records for this purpose, and any other relevant (i.e., GSA or Commerce) directive. Such disclosure shall not be used to make determinations about individuals.
- 8. A record from this system of records may be disclosed, as a routine use, to the public after either publication of the application pursuant to 35 U.S.C. 122(b) or issuance of a patent pursuant to 35 U.S.C. 151. Further, a record may be disclosed, subject to the limitations of 37 CFR 1.14, as a routine use, to the public if the record was filed in an application which became abandoned or in which the proceedings were terminated and which application is referenced by either a published application, an application open to public inspection or an issued patent.
- A record from this system of records may be disclosed, as a routine use, to a Federal, State, or local law enforcement agency, if the USPTO becomes aware of a violation or potential violation of law or regulation.

| | Application | No. | Applicant(s) | | | |
|---|---|---|--|--------------------|--|--|
| | | | | | | |
| Notice of Allowability | 09/124,805 Examiner | | LAMPING ET AL. Art Unit | | | |
| , | | | | | | |
| | JIN-CHENG | WANG | 2628 | | | |
| The MAILING DATE of this communication app. All claims being allowable, PROSECUTION ON THE MERITS IS therewith (or previously mailed), a Notice of Allowance (PTOL-85) NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT B of the Office or upon petition by the applicant. See 37 CFR 1.315 | (OR REMAINS or other appro IGHTS. This a | CLOSED in this ap priate communication pplication is subject to | plication. If not include will be mailed in due | ed course. THIS | | |
| This communication is responsive to <u>BPAI Decision on 11/3</u> | ☐ This communication is responsive to BPAI Decision on 11/30/2011 and Appeal Brief filed 9/10/2007. | | | | | |
| An election was made by the applicant in response to a res requirement and election have been incorporated into this action. | | nent set forth during t | he interview on | ; the restriction | | |
| The allowed claim(s) is/are <u>29-44</u>. | | | | | | |
| 4. ☐ Acknowledgment is made of a claim for foreign priority under a) ☐ All b) ☐ Some* c) ☐ None of the: A ☐ Confederation of the priority description of the confederation of | | | | | | |
| Certified copies of the priority documents have Certified copies of the priority documents have | | | | | | |
| Certified copies of the priority documents have been received in Application No Copies of the certified copies of the priority documents have been received in this national stage application from the | | | | | | |
| International Bureau (PCT Rule 17.2(a)). | oumonto navo i | 3001110001100 111 1110 | national olago applica | | | |
| * Certified copies not received: | | | | | | |
| Applicant has THREE MONTHS FROM THE "MAILING DATE" noted below. Failure to timely comply will result in ABANDONA THIS THREE-MONTH PERIOD IS NOT EXTENDABLE. | of this commur MENT of this ap | nication to file a reply plication. | complying with the red | quirements | | |
| 5. A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient. | | | | | | |
| 6. CORRECTED DRAWINGS (as "replacement sheets") mus | t be submitted. | | | | | |
| (a) including changes required by the Notice of Draftspers | son's Patent Dr | awing Review (PTO- | 948) attached | | | |
| 1) hereto or 2) to Paper No./Mail Date | | | | | | |
| (b) including changes required by the attached Examiner' Paper No./Mail Date | s Amendment / | Comment or in the C | Office action of | | | |
| Identifying indicia such as the application number (see 37 CFR 1 each sheet. Replacement sheet(s) should be labeled as such in 1 | .84(c)) should b the header accor | e written on the drawi rding to 37 CFR 1.121(| ngs in the front (not the d). | back) of | | |
| DEPOSIT OF and/or INFORMATION about the deposit of E attached Examiner's comment regarding REQUIREMENT FO | | | | | | |
| Attachment(s) | _ | _ | | | | |
| 1. Notice of References Cited (PTO-892) | | Notice of Informal F | | | | |
| Notice of Draftperson's Patent Drawing Review (PTO-948) | 6. | Interview Summary Paper No./Mail Da | | | | |
| Information Disclosure Statements (PTO/SB/08), Paper No./Mail Date | _ | 7. Examiner's Amendment/Comment | | | | |
| Examiner's Comment Regarding Requirement for Deposit of Biological Material | | | ent of Reasons for Allo | | | |
| | | Other <u>The drawings</u> he Examiner. | filed 11/16/1999 has | been accepted | | |
| /Jin-Cheng Wang/ Primary Examiner, Art Unit 2628 | | | | | | |

Art Unit: 2628

Reasons for Allowance

The following is an examiner's statement of reasons for allowance:

The claims 29-44 of the Appeal Brief filed 9/10/2007 are allowed according to the BPAI's decision on 11/30/2011. The claims 1-28 have been canceled in the Appeal Brief filed 9/10/2007. According to the BPAI decision, nothing in the prior arts teaches "a method of laying out a plurality of elements of a node-link structure in a space with negative curvature, the method comprising: obtaining nearby relationship data for each element in the plurality, the nearby relationship data indicating information about nearby node-link relationships; based on the nearby relationship data for each element in the plurality, calculating element's position in the space with negative curvature; and storing the positions for each element in the plurality in a data structure such that after the positions for all elements in the plurality have been calculated, the position of each element in the plurality is stored in the data structure only relative to an element of the node-link structure other than a root element of the node-link structure", set forth in the exemplary claim 29. The claims 30-44 are allowed for the same reasons as above according to the BPAI decision.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Art Unit: 2628

Conclusion

Any inquiry concerning this communication or earlier communications from the

examiner should be directed to Jin-Cheng Wang whose telephone number is (571) 272-7665.

The examiner can normally be reached on 8:00 - 6:30 (Mon-Thu).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, Kee Tung can be reached on (571) 272-7794. The fax phone number for the

organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent

Application Information Retrieval (PAIR) system. Status information for published applications

may be obtained from either Private PAIR or Public PAIR. Status information for unpublished

applications is available through Private PAIR only. For more information about the PAIR

system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR

system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would

like assistance from a USPTO Customer Service Representative or access to the automated

information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Jin-Cheng Wang/

Primary Examiner, Art Unit 2628